

FOR INFORMATION/ACTION
DA# 2006-31
July 17, 2006

SUBJECT: *Phytophthora ramorum* (ramorum blight & dieback, sudden oak death); Listing and Regulation of Plants Recently Reported with *P. ramorum*.

TO: STATE AND TERRITORY AGRICULTURAL REGULATORY OFFICIALS

On February 14, 2002, APHIS published an interim rule in the Federal Register for *P. ramorum* (7 CFR 301.92). This rule regulates the interstate movement of restricted and regulated articles to prevent the artificial spread of this disease-causing organism from areas where the disease is established. We also issued an Emergency Federal Order dated December 21, 2004, to regulate certain nurseries and plants to prevent the spread of the pathogen through nursery plants.

The purpose of this SPRO is to provide notification that APHIS will be regulating certain new species, effective August 1, 2006. This action is necessary as we have learned that *Ceanothus thyrsiflorus*, *Cinnamomum camphora*, *Kalmia angustifolia*, *Nerium oleander*, *Osmanthus fragrans*, *Osmanthus heterophyllus*, and *Quercus acuta* can be infected by *P. ramorum* and need to be regulated in order to control the artificial spread of this disease. These new plant taxa have been added to the "Plants Associated with *Phytophthora ramorum*" list. Also, *Fagus sylvatica*, *Kalmia latifolia*, *Quercus cerris*, *Salix caprea*, and *Viburnum spp.* have been transferred to the "Proven Hosts Regulated for *Phytophthora ramorum*" list, based on Koch's postulates.

There are two attachments to this SPRO: "Federal Domestic Quarantine Order" which identifies plants to be added to those regulated for *P. ramorum* in the Emergency Federal Order dated December 21, 2004, and the updated "APHIS List of Regulated Hosts and Plants Associated with *Phytophthora ramorum*", dated 11 July 2006.

/s/ Richard L. Dunkle for

Richard L. Dunkle
Deputy Administrator
Plant Protection and Quarantine

FEDERAL DOMESTIC QUARANTINE ORDER *PHYTOPHTHORA*
***RAMORUM*; 7 CFR 301.92**
July 17, 2006

We received information from California and the United Kingdom's Department for Environment, Food and Rural Affairs (DEFRA) identifying plants associated with *P. ramorum* not previously reported. Dr. David Rizzo reported one naturally infected woodland plant. The California Department of Food and Agriculture reported three new plants in a California nursery. The United Kingdom's DEFRA reported several new detections of plants infected with *P. ramorum*. DEFRA also reported that Koch's postulates have been completed for a number of plants previously listed as plants associated with *P. ramorum*. We have revised our listing for *Viburnum* to cover the entire genus. The plants newly added are:

- *Ceanothus thyrsiflorus*
 - Family: Rhamnaceae (Buck thorn family)
 - Common name: blueblossom
- *Cinnamomum camphora*
 - Family: Lauraceae (Laurel family)
 - Common name: camphor tree
- *Kalmia angustifolia*
 - Family: Ericaceae (Heath family)
 - Common name: sheep laurel
 - Symptom: leaf blight, twig dieback
- *Nerium oleander*
 - Family: Apocynaceae (Dogbane family)
 - Common name: oleander
 - Symptom: leaf blight
- *Osmanthus fragrans*
 - Family: Oleaceae (Olive family)
 - Common name: sweet olive
 - Symptom: leaf blight, dieback
- *Osmanthus heterophyllus*
 - Family: Oleaceae (Olive family)
 - Common name: holly olive
 - Symptom: leaf blight, dieback
- *Quercus acuta*
 - Family: Fagaceae (Beech family)
 - Common name: Japanese evergreen oak

As Koch's Postulates have been completed, these plants are moved from the list, "Plants Associated with *Phytophthora ramorum*" to the list of "Proven Hosts Regulated for *Phytophthora ramorum*":

Fagus sylvatica, *Kalmia latifolia*, *Quercus cerris*, and *Salix caprea*.

As, to date, eleven species of *Viburnum* have been listed on the "APHIS List of Regulated Hosts and Plants Associated with *Phytophthora ramorum*" we are now regulating the entire genus of *Viburnum* - all species, hybrids and cultivars. This is in addition to *Rhododendron* and *Camellia* already regulated at the level of genus.

As an interim measure, the above plants are added to those already regulated as per PPQ Emergency Federal Order (Order) dated December 21, 2004, which regulates the movement of nursery stock from the States of Washington, Oregon and California. Those nurseries operating under a compliance agreement may continue to ship Hosts and Associated Plants including the newly listed plants. Any other nurseries containing these newly listed associated plants must be properly inspected, sampled, tested and placed under a Compliance Agreement by August 1, 2006, to be able to move the above listed plants interstate.

This action is authorized by the Plant Protection Act of June 20, 2000, as amended, Section 412(a), 7 U.S.C. 7712(a), which authorizes the Secretary of Agriculture to prohibit or restrict the movement in interstate commerce of any plant, plant part, or article if the Secretary determines the prohibition or restriction is necessary to prevent the dissemination of a plant pest within the United States.

APHIS List of Regulated Hosts and Plants Associated with *Phytophthora ramorum*

(Revision dated 11 July 2006)

This list is continually being updated.

The most current version is posted at: <http://www.aphis.usda.gov/ppq/ispm/pramorum>

Proven Hosts Regulated for *Phytophthora ramorum*

Scientific Name (43)	Common Name(s)	Notes
<i>Acer macrophyllum</i>	Bigleaf maple	
<i>Adiantum aleuticum</i>	Western maidenhair fern	
<i>Adiantum jordanii</i>	California maidenhair fern	
<i>Aesculus californica</i>	California buckeye	
<i>Arbutus menziesii</i>	Madrone	
<i>Arctostaphylos manzanita</i>	Manzanita	
<i>Calluna vulgaris</i>	Scotch heather	
<i>Camellia</i> spp.	Camellia - all species, hybrids and cultivars	
<i>Castanea sativa</i>	Sweet chestnut	
<i>Fagus sylvatica</i>	European beech	Koch's postulates completed
<i>Frangula californica</i> (= <i>Rhamnus californica</i>)	California coffeeberry	
<i>Frangula purshiana</i> (= <i>Rhamnus purshiana</i>)	Cascara	
<i>Fraxinus excelsior</i>	European ash	
<i>Griselinia littoralis</i>	Griselinia	
<i>Hamamelis virginiana</i>	Witch hazel	
<i>Heteromeles arbutifolia</i>	Toyon	
<i>Kalmia latifolia</i>	Mountain laurel	Koch's postulates completed
<i>Lithocarpus densiflorus</i>	Tanoak	
<i>Lonicera hispidula</i>	California honeysuckle	
<i>Maianthemum racemosum</i> (= <i>Smilacina racemosa</i>)	False Solomon's seal	
<i>Parrotia persica</i>	Persian ironwood	
<i>Photinia fraseri</i>	Red tip photinia	
<i>Pieris floribunda</i> and <i>Pieris floribunda</i> x <i>japonica</i> & all hybrids of <i>P. floribunda</i>	Mountain Andromeda	

<i>Pieris formosa</i> and <i>P. formosa</i> x <i>japonica</i> & all hybrids of <i>P. formosa</i>	Himalaya Andromeda	
<i>Pieris japonica</i> & all hybrids of <i>P. japonica</i>	Japanese Pieris	
<i>Pseudotsuga menziesii</i> var. <i>menziesii</i> & all nursery grown <i>P. menziesii</i>	Douglas fir	
<i>Quercus agrifolia</i>	Coast live oak	
<i>Quercus chrysolepis</i>	Canyon live oak	
<i>Quercus cerris</i>	European turkey oak	Koch's postulates completed
<i>Quercus falcata</i>	Southern red oak	
<i>Quercus ilex</i>	Holm oak	
<i>Quercus kelloggii</i>	California black oak	
<i>Quercus parvula</i> var. <i>shrevei</i> & all nursery grown <i>Q. parvula</i>	Shreve's oak	
<i>Rhododendron</i> spp.	Rhododendron (including azalea) – all species, hybrids and cultivars	
<i>Rosa gymnocarpa</i>	Wood rose	
<i>Salix caprea</i>	Goat willow	Koch's postulates completed
<i>Sequoia sempervirens</i>	Coast redwood	
<i>Syringa vulgaris</i>	Lilac	
<i>Taxus baccata</i>	European yew	
<i>Trientalis latifolia</i>	Western starflower	
<i>Umbellularia californica</i>	California bay laurel, pepperwood, Oregon myrtle	
<i>Vaccinium ovatum</i>	Evergreen huckleberry	
<i>Viburnum</i> spp.	All species of Viburnum	Now listing as all species, hybrids and cultivars of entire genus

Plants Associated with *Phytophthora ramorum*

(These are regulated only as nursery stock)

Scientific Name (54)	Common Name, Date & Source of Report	Notes
<i>Abies concolor</i>	White fir – Oct 05 (1)	
<i>Abies grandis</i>	Grand fir – June 03 (1)	
<i>Abies magnifica</i>	Red fir – Jan 06 (7)	
<i>Acer circinatum</i>	Vine maple – Feb 06 (5)	
<i>Acer davidii</i>	Striped bark maple – Jan 06 (9)	
<i>Acer laevigatum</i>	Evergreen Maple – Aug 05 (3)	
<i>Acer pseudoplatanus</i>	Planetree maple – April 05 (3)	
<i>Aesculus hippocastanum</i>	Horse chestnut – Dec 03 (3)	
<i>Arbutus unedo</i>	Strawberry tree – Dec 02 (7)	
<i>Arctostaphylos columbiana</i>	Manzanita – Feb 06 (5)	
<i>Ardisia japonica</i>	Ardisia – Jan 06 (9)	
<i>Calycanthus occidentalis</i>	Spicebush – May 05 (5)	
<i>Ceanothus thyrsiflorus</i>	Blueblossom – April 06 (5)	New detection in US
<i>Cinnamomum camphora</i>	Camphor tree – May 06 (3)	New detection in UK
<i>Clintonia andrewsiana</i>	Andrew's clintonia bead lily – May 04 (5)	
<i>Corylus cornuta</i>	California hazelnut – Dec 02 (5)	
<i>Drimys winteri</i>	Winter's bark – July 04 (3)	
<i>Dryopteris arguta</i>	California wood fern – May 04 (5)	
<i>Euonymus kiautschovicus</i>	Spreading euonymus – Jan 06 (9)	
<i>Fraxinus latifolia</i>	Oregon ash – Aug 05 (5)	
<i>Gaultheria shallon</i>	Salal, Oregon wintergreen – Jan 06 (9)	
<i>Hamamelis x intermedia</i> (<i>H. mollis</i> & <i>H. japonica</i>)	Hybrid witchhazel – Jan 06 (9)	
<i>Hamamelis mollis</i>	Chinese witchhazel – Jan 05 (3)	
<i>Kalmia angustifolia</i>	Sheep laurel – May 06 (3)	New detection by UK – plant from Netherlands
<i>Laurus nobilis</i>	Bay laurel – July 04 (3)	
<i>Leucothoe axillaris</i>	Fetterbush, dog hobble – Jan 06 (9)	

<i>Leucothoe fontanesiana</i>	Drooping leucothoe - Oct 03 (3)	
<i>Magnolia grandiflora</i>	Southern magnolia – Jan 06 (9)	
<i>Magnolia stellata</i>	Star magnolia – Jan 05 (3)	
<i>Magnolia x loebneri</i>	Loebner magnolia – Jan 05 (3)	
<i>Magnolia x soulangeana</i>	Saucer magnolia – Jan 05 (3)	
<i>Michelia doltsopa</i>	Michelia – Aug 05 (3)	
<i>Michelia maudiae</i>	Michelia – Jan 06 (9)	
<i>Michelia wilsonii</i>	Michelia – Jan 06 (9)	
<i>Nerium oleander</i>	Oleander – June 06 (1)	New detection in US
<i>Nothofagus obliqua</i>	Roble beech – Dec 04 (3)	
<i>Osmorhiza berteroi</i>	Sweet Cicely – Aug 05 (5)	
<i>Osmanthus decorus</i> (= <i>Phillyrea decora</i> ; = <i>P. vilmoriniana</i>)	Osmanthus – Jan 06 (9)	
<i>Osmanthus fragrans</i>	Sweet olive – June 06 (1)	New detection in US
<i>Osmanthus heterophyllus</i>	Holly olive – June 06 (1)	New detection in US
<i>Pittosporum undulatum</i>	Victorian box – Dec 02 (6)	
<i>Prunus lusitanica</i>	Portuguese laurel cherry – Jan 06 (9)	
<i>Pyracantha koidzumii</i>	Formosa firethorn – Apr 04 (9)	
<i>Quercus acuta</i>	Japanese evergreen oak – May 06 (3)	New detection in UK
<i>Quercus petraea</i>	Sessile oak – Aug 05 (3)	
<i>Quercus rubra</i>	Northern red oak – Nov 03 (8)	
<i>Rosa</i> “Meidiland”	Hybrid rose – Jan 06 (9)	Temporary listing under registered trade name
<i>Rosa rugosa</i>	Rugosa rose – Jan 06 (9)	
<i>Rubus spectabilis</i>	Salmonberry – Dec 02 (4)	
<i>Taxus brevifolia</i>	Pacific yew – May 03 (5)	
<i>Taxus x media</i>	Yew – June 05 (8)	
<i>Torreya californica</i>	California nutmeg – Aug 05 (5)	
<i>Toxicodendron diversilobum</i>	Poison oak – Dec 02 (4)	
<i>Vancouveria planipetala</i>	Redwood ivy – Aug05 (5)	

- | | |
|----|---|
| 1 | California Department of Food and Agriculture, Sacramento, CA |
| 2 | Oregon Department of Agriculture. Salem, OR |
| 3 | Department for Environment, Food and Rural Affairs, UK |
| 4 | Everett Hanson, Oregon State University, Corvallis, OR |
| 5 | David Rizzo, University of California, Davis, CA |
| 6 | Matteo Garbelotto, University of California, Berkeley, CA |
| 7 | Gary Chastagner, Washington State University, Puyallup, WA |
| 8 | Plant Protection Service, Wageningen, Netherlands |
| 9 | Canadian Food Inspection Agency, Ottawa, Ontario, Canada |
| 10 | (Reserved) |
| 11 | (Reserved) |

Rationale for Lists:

Host Plants Regulated for *Phytophthora ramorum*:

Naturally infected associated plants are deemed host plants regulated for *P. ramorum* upon completion, documentation, review and acceptance of traditional Koch's postulates. Details on regulated plants and articles can be found via links to "Phytophthora ramorum 7 CFR 301.92" and "Recent Modifications to Phytophthora ramorum Regulations" at: <http://www.aphis.usda.gov/ppq/ispm/pramorum>

The plants listed in the original Interim Rule dated 14 February 2002 were adapted from a review and evaluation of lists of regulated plants from other regulatory agencies.

Plants Associated with *Phytophthora ramorum*:

Plants associated with *P. ramorum* are naturally infected plants and from which *P. ramorum* has been cultured and/or detected using PCR (Polymerase Chain Reaction). Traditional Koch's postulates have not yet been completed nor documented and reviewed for each of these associated plants. These reports must be documented and reviewed by PPQ before they will be listed.

Regulation at the genus level:

Plants included in either of the above lists may be regulated at the genus level. This will ensure appropriate and effective inspection in quarantine areas, regulated nurseries, and regulated articles to mitigate the spread of *P. ramorum*. An example is when the number of individual species, hybrids, or cultivars listed or to be listed is determined to hinder appropriate and effective inspection or regulation.

Agency Contact:

Jonathan Jones

(301) 734-8247

jmjones@aphis.usda.gov